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Ad Val Advisor

The Newsletter for Wyoming Property Tax Appraisers

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From the Administrator

WHERE DID IT GO?

Where did the September issue of the Ad Val Advisor go? Truth is, it went nowhere. Here at Ad Valorem we just did not have time to publish it. That was unfortunate and I hope we can avoid it in the future.

Certainly, September was not devoid of happenings. Much work was finished by the various standards committees for the CAMA conversion standards. The WACO meeting came and went. Ad Valorem staff met with the Assessors and with the Treasurers during their respective meetings at WACO. The Ad Valorem Division has been providing information and testimony to the Joint Interim Revenue Committee and its Intangible Property Subcommittee on the intangible property issue, as well as other issues. Hopefully, this will lead to useful legislation on the intangible question next year. Those meetings and discussions continue.

During October, Ad Valorem staff and I also testified before the Joint Interim Corporations Committee. We also assisted in the preparation of a bill for introduction next legislative session that should assist special districts in complying with the mapping and legal description standards, while allowing sufficient information to be collected to accurately map those districts.

Meanwhile, Ad Valorem staff continues to work on CAMA issues, education issues, and all of those other day-to-day tasks that keep things interesting and engaging around here. As to no newsletter last month, my best analogy for that is that when you're in the middle of playing the big ball game, it's hard to make the play-by-play commentary too. That said, enjoy two month's of news this month!

Wade W. Hall
Administrator
Ad Valorem Tax Division

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GIS & CAMA Integration

Overview

The CCI RealWare product offers a high level of integration between CAMA and GIS. This integration allows the user to interchangeably use tabular data and maps to research and display information.

The full integration of GIS into the RealWare product does not take an extensive data conversion plan. In fact, one of the more appealing aspects of this integration will be the county's ability to maintain their GIS program independently, while still providing the much needed spatial data integration.

CCI's new GIS product, which is called GeoWare, is an ESRI based solution which is developed in the web-based ArcIMS architecture. Initially, GeoWare is being installed as an Intranet-based solution. This means that all of the maps and the integrated data are accessible only in-house, based on the security you setup for your individual users.

Data Conversion

As an ESRI-based map display and querying solution, there are several GIS file formats that will work with the application. The following formats will operate correctly:

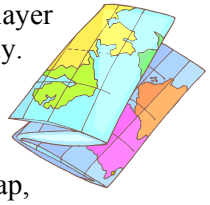
- Shapefiles
- Coverages
- Geodatabase
- Spatial Database Engine (SDE)

Both CCI and DOR recognize that there are several brand name GIS software applications in use in Wyoming. The most notable software package, other than the ESRI brand, is MapInfo. MapInfo users may also take advantage of the GIS/CAMA integration by simply converting the appropriate GIS data to a Shapefile.

Granted, this approach will require the county to convert their parcel maps and other GIS based drawings to Shapefiles as they are modified. However, this approach can most always be done quickly without additional associated costs.

Data Layers

GeoWare requires, at a minimum, a parcel layer to operate correctly. However, many different layers of information can be included on the map, which includes aerial and satellite imagery. The following list shows the type of data that can be included in GeoWare. These datasets are listed in order of importance for GeoWare:



- Parcel Layer
- Public Land Survey System (PLSS) (i.e., township/range, sections, etc.)
- Tax Entities and Districts
- Governmental Lots & Tracks
- Roads (i.e., Federal, State, County road networks, etc.)
- Hydrological Features (i.e., lakes, rivers, streams, floodplains, etc.)
- Contour Lines
- Aerial Photography
- Satellite Imagery
- Scanned Maps (i.e., DRG's, GLO, right-of-way maps, etc.)

Please note, the GeoWare environment can operate with all or portion of the datasets shown here. Again, the primary file required is the parcel layer. For those counties where the parcel layer is incomplete, connectivity will still function correctly wherever data exists in both the RealWare product and in the GIS file itself.

Data Connectivity

Data connectivity between RealWare and GeoWare is straight forward. In the RealWare product, the Assessor will need to identify what GIS files are to be used and where they are stored. In the case of the parcel layer, the GeoPIDN must be the same number as the RealWare Parcel number. Finally, the Assessor will need to identify the format in which the GIS GeoPIDN is stored. This process will match up the data formatting between the RealWare and the GIS file and will allow connectivity through a global option setting. Please note, the AA Committee has decided that all Account Numbers will be stored without punctuation (i.e., dashes, periods, etc.). Those counties that choose to retain the punctuation within the parcel information will be required to adjust the global option setting to match their existing GIS dataset.

It is highly recommended that the GIS data used in the RealWare/GeoWare integration is a copy of the original production data. This will ensure that your local GIS technicians are able to work with the data with no restrictions. Granted, this will require the data to be refreshed occasionally to ensure the RealWare users have access to the most current spatial information.

Conclusion

GeoWare is a map viewing/selection tool that bridges the gap between GIS spatial data, and RealWare CAMA data. The seamless integration between these two features means that your office will have one point for data entry, which will contribute to improved data accuracy, and a reduction in processing time.

The GIS implementation has been designed to offer as few obstacles as possible for the County. Existing GIS programs will be able to continue fairly unimpeded, while now being able to offer spatial data access to a wider selection of users.

David Chapman
Local Assessed Manager
Ad Valorem Tax Division

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Conversion of Sales History Data

There has been some concern with the conversion of sales history data into the RealWare product. Hopefully, this article will answer your questions on this issue.

Every sale must have a valid and unique Book & Page, or Reception Number, recording the sale along with the Sale Date. This creates a problem for CLT counties as the Book & Page, or Reception Number, along with the Sale Date for the most recent sale, is stored in the Assessment Administration (AA) side of the Mainframe. The Sale Price and property characteristics at the time of sale are stored in CAMA on the Mainframe. This is where the problem begins. In CAMA, the last three sales are stored with Month, Year, Amount, all Verification Codes and the property characteristics at the time of sale.

For conversion purposes, CCI will match the Month and Year of the sale in CAMA to the Month and Year of the Sale in AA to populate the sales file in RealWare. A word of caution to CLT counties; Make sure you have the most recent sale recorded in AA and CAMA as we are only populating the sales file in RealWare with one sale. The other two sales in CAMA are not going to be converted because we have no Date, Book & Page or Reception Number, or Grantor/ Grantee names to match the sales to. However, this data will not be lost. We are planning to drop the other two sales into an Access database for Assessors to maintain in their office. Each Assessor can hand-enter these prior sales into the sales file in RealWare after conversion if they have all pertinent data.

WYS counties are not running into this problem. The sales history file maintains property characteristics for each sale along with the Book &

Page or Reception Number, Grantor/Grantee, Sale Amount and Date for each sale in the file. All sales that appear in the data dump will be converted to the CCI RealWare Sales file.

Jeffery Moore
Principal Appraiser
Ad Valorem Tax Division

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Personal Property Clean Up

There are a couple of issues concerning clean-up of your personal property data we would like to inform you about.

1) Two counties notified us that they had a pair of Categories where the composite factor was reading 35.000 instead of .3500. A TASB334 report was run for these counties, and it was discovered that the two categories came out with composite factors of .0000. The reason the report did not pick up the 35.0000 is that the program is set up to only read the five decimal places. The categories that read this way in these two counties were #1015 and #4099. Ad Valorem set all composite factors to .2500 a couple of years ago and pushed them out to all the counties, but some of these have been changed since then.

All categories in Table 8 need to be reviewed. Make sure that the Salvage, Composite and Freeze factors are what you want them set at for uniformity, as well as conversion. The tables are frozen, so you won't be able to make any changes. You will have to notify Ad Valorem to have any changes made.

2) The Fremont County Assessor's Office identified a couple of errors in the Personal Property Conversion Standard document that needed to be corrected. Some of the category numbers that were combined were wrong, and we had added the Agricultural Abstract Code Number to them. CCI's system uses the Abstract Code to drive the Assessment Level of 9.5% versus 11.5%. The conversion document has been updated on the share point web site to reflect the changes.

We want to thank Fremont county for finding the mistakes. If any of you find any additional errors, please let us know so that we can make the conversion as smooth as possible.

Joyln Stotts
Principal Appraiser
Ad Valorem Tax Division

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Name & Address Conversion Strategy

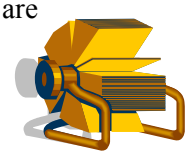
Depending on how information is stored in a legacy database, moving the data into a new system can either be straight forward, or fairly complex. The conversion of mainframe name and address records is an example of a challenging data transfer.

We don't intend to "overload" you with conversion detail, but feel it is important to provide you with an example of how some conversion issues require some thought to avoid time consuming clean-up.

Based on work performed by CCI, the Department and the AA Committee, the following set of rules have been formulated for data conversion of name and address data.

CLT Counties

In the CLT mainframe CAMA system, four lines are dedicated to the name and address. These lines have traditionally been free form with Name, Address and In-Care-Of appearing on any line. The City, State and Zip are stored in separate fields which will be converted directly into tblAddress within the CCI RealWare product. Here are the general rules on how Name and Address will be organized for conversion into the right location:



1. If only one line has data, it will be assumed to be the Name.

2. If more than one line has data, but not all four, the first line will be considered the Name and the remaining lines will be checked using the following logic:

    a. If first character in line is a number, then assume it is an Address line. If there is another line after this, also assume it is an Address line.
    b. If the line contains the word "box" with a space, assume it is an Address line. If there is another line after this, assume it is an Address line also.

3. If all four lines are used, the first line is Name and the last line is Address. The middle two will be checked based on the rules above (2a. and 2b.)

4. If there is data in the Foreign Country field, concatenate the City with the Foreign Country field and direct this data into the City field in tblAddress.

WYS Counties *(Not including Personal Property)*

In the WYS mainframe system there are three lines for Name, one line for Street Address and one line for City and State (please note, these are not separate fields). In conversion, we will concatenate Name lines two and three together. For City and State, we will break these out based on the following rules:

Take last three characters in City and State line.

a. If the first character is a space - assume the State code is the last two characters.

b. If the word "Wyoming" is spelled out, State code is "WY" and the characters before belong in the City field.

WYS Personal Property

In the WYS Personal Property mainframe system, there are four lines for Name and Address (like CLT) and one line for City and State. In the record layout, there are separate fields, but in the data dumps, we have found some States where part or all of the State code was missing and located in the fillers around the State field. Here are the following rules for converting:

1. For Name and Address lines the conversion team will be using the same logic as CLT (see earlier example).

2. If there are not two characters in the State field, the conversion will look in the fillers to determine the State code. If the State code cannot be determined, the conversion routine will leave the State field blank and only convert City.

Glenn Ryan
Conversion Specialist
Colorado CustomWare

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Quote of the Month

"Life is what happens to you while you're busy making other plans"

–John Lennon

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Treasurer System Connectivity

There have been some concerns raised regarding the integration of the RealWare system and County Treasurers' systems.

CCI is currently collecting business requirements and planning to make a data file available that will contain all of the fields currently produced by the RealWare Tax Roll process. CCI is also working on building a sample file in XML or Microsoft Access format that will contain these fields with Wyoming data. Other file formats can be made available if needed, but we are attempting to get to one inclusive file and format that will work across all of Wyoming.

CCI will make that file available to each County for review with the Treasurer system. You will then have an opportunity to provide feedback to this approach and include recommendations and other information that may be required by your County Treasurer system.

In addition, it will be announced at the upcoming CCI Users Conference that CCI is in the process of developing CollectWare for County Treasurers. This exciting new product will integrate with RealWare natively.

Kevin O'Connell
Project Manager
Colorado CustomWare

DOR Note: The Department has not contracted with CCI to integrate the RealWare product with your local county treasurer system. This integration will continue to be the responsibility of the each county.

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A New Way of Valuing Land

Everyone seems to be pretty excited about finally being able to use Marshall & Swift cost tables to generate and defend improvement values. Having a nationally recognized cost system in place for valuing our structures will definitely make life easier for all of us. But, what about land? How will residential and commercial land values be generated, and how easy will it be for the average taxpayer to understand our new valuation methods? Hopefully, the following summary will get you closer to answering that question.

Our CLT and WYS Neighborhoods will become Land Economic Areas (LEAs) in RealWare. All vacant and improved land (except for agricultural land) will be valued using LEAs.

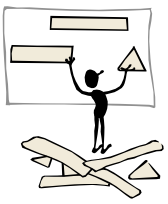
An LEA can be defined by physical boundaries, or by similar external forces affecting different areas within a jurisdiction. Each LEA can have up to five different units of measure (Site, Square Foot, Acre, Front Foot, and Unit) that possess their own pricing model. The Unit and Site models only use a Base Rate, while the SF, Acre, and FF models use three parameters; a Base Rate, an Exponent, and an Intercept (constant).

If you imagine a graph with land sizes on the x – axis, and values on the y –axis, the Base Rate will determine the overall slope (steepness) of the value line. The Exponent will determine the degree of "bend" of the line reflecting the decrease of additional value for additional units of measure. The function of the Exponent can be compared to the increment and decrement rates, and the range and graduated methods, we now use to take care of the sliding scale. The Intercept in the pricing models is simply a constant value that is added to the parcel regardless of land size. It dictates what the lowest possible value for a piece of land can be. It should also be mentioned that values can still be adjusted at the parcel level with influence/attribute factors.

Another question that probably comes to mind is: "Can my current valuation models be converted to LEA models?" Regretfully, the

answer is "no." Neither our legacy increment/decrement data nor our various rates for different land size intervals can be used to generate complete RealWare pricing models. Only sales data can be utilized in statistical analysis to determine the Exponent and Intercept parameters. For conversion purposes, a factor will be calculated and entered in RealWare to tie our land values to the rates that are being brought in. The Land Conversion Standards document will provide more detail on this.

The Land Conversion Committee has requested early training sessions for all Assessors on LEA model development. It would be beneficial if Assessors and their staffs could work on building LEA models, and maybe have them completed, prior to their counties being converted. CCI will be hosting a web presentation on LEAs on November 3, 2004. This is a CCI Coffee Club demonstration that does not specifically target Wyoming users, but it is recommended that you attend to get a flying start in learning the land valuation methods in RealWare. To sign up, please email CCI at Support@COLORADOCUSTOMWARE.COM.



Geir Solvang
Principal Appraiser
Ad Valorem Tax Division

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Large Print Projects in RealWare

As the new CAMA project unfolds, several questions arise as to how RealWare will perform certain tasks in comparison to the legacy system. One of these questions is how large print projects, such as notices of value (NOVs) and/or tax rolls, are run and printed in RealWare.

NOVs and NODs (notice of determination) can be produced in RealWare by account number, map number, appeal number, account type, and tax district. Notices can also be produced by actual value change, adjusted actual value change, assessed value change, and adjusted assessed value change, each of these allowing for a 'from' and 'to' dollar amount criteria. Each county can also run notices based on value changes or changes in ownership since the last notice was sent. RealWare provides a user-friendly interface, which is only accessible by personnel with proper security.

Each county has the option to print notices in-house or send an electronic file to an outside source. RealWare provides Microsoft Word templates that merge with the RealWare tables to produce a finished NOV/NOD document. The Word documents are editable by each county; you can customize the documents to suit your specific needs, i.e., county logo, etc. You can choose to print all your notices in-house or just use the template for the occasional need to print a small quantity.

Many counties, simply because of time and manpower constraints, choose to send large printing projects to an outside source. When generating NOVs in RealWare the user has an option to send the NOVs to a file, which creates two Microsoft Access tables called NOV and NOV1. After these tables are created, users can query the information from both tables and export the file to a .txt file, which is sent to the printing company.

When the tax roll has been generated through RealWare this information is stored in a table called tblTaxRoll. Users again can query this table to build a file to send out.

CCI's goal is to provide, in RealWare, options that are flexible and user-friendly. Even in a large, multi-jurisdictional project like the Wyoming CAMA project, each county individually can decide how to handle certain processes; large print projects are one of those processes.

Nancy Roldan
Professional Services Coordinator
Colorado CustomWare

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07/14/05
IAAO Forum 917,
How to Critique an Appraisal,
Laramie, WY

08/22/05 – 08/26/05
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